

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

B.E. Sem-IV Examination June- 2010

Subject code: 140402

Subject Name: Basic Taxonomy & Techniques

Date: 18 / 06 / 2010

Time: 10.30 am – 01.00 pm

Total Marks: 70

Instructions:

- 1. Attempt all questions.**
- 2. Make suitable assumptions wherever necessary.**
- 3. Figures to the right indicate full marks.**

- Q.1** (a) Give the historical background of taxonomy. **07**
(b) Give the contribution of Linnaeus in the field of taxonomy. **07**

- Q.2** (a) Describe the role of morphological and anatomical characterization of organisms in taxonomy. **07**
(b) Write a note on biochemical characterization of organisms. **07**

OR

- (b) Discuss the techniques of genetical and molecular characterization of organisms. **07**

- Q.3** (a) Define plant taxonomy and describe the methods of plant classification. **07**
(b) Write a note on scientific nomenclature of plants. **07**

OR

- Q.3** (a) Enlist important plant families and describe any one in detail. **07**
(b) Describe the scope and importance of plant classification. **07**

- Q.4** (a) What is animal diversity? Comment on diversity in animals. **07**
(b) Describe the present status of animal classification. **07**

OR

- Q.4** (a) Write a note on early attempts of animal classification. **07**
(b) Discuss recent developments in the field of animal taxonomy. **07**

- Q.5** (a) Explain the importance of 16S rRNA analysis in the construction of phylogenetic tree. **07**
(b) Scientific nomenclature of bacteria with examples. **07**

OR

- Q.5** (a) Describe traditional characters used to classify prokaryotes. **07**
(b) Discuss the general features of mycoplasma. **07**
